



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,800	10/27/2000	Kenneth Snowdon	476-1951	5134

7590

12/12/2002

William M Lee Jr
Lee Mann Smith McWilliams Sweeney & Ohlson
P O Box 2786
Chicago, IL 60690-2786

EXAMINER

COLAIANNI, MICHAEL

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 12/12/2002

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/698,800

Applicant(s)

Snowdon et al.

Examiner
Michael Colaanni

Art Unit
1731



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 7, 2002
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above, claim(s) 10-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 28-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1731

Election/Restriction

1. Applicant's election of Group I, claims 1-9, 28-38 in Paper No. 7 is acknowledged.

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 10-27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 7.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 7 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 is missing a claim number to indicate from which claim it was intended to depend.

To expedite prosecution, the examiner assumed that claim 7 was meant to depend from claim 1.

Claim 34 uses improper Markush claim language. The claims should be amended to read, "... selected from the group consisting of ...".

Art Unit: 1731

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 7, 28-30, 37-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Kramer 5143531.

Kramer teaches forming a bond between an optical fiber and a metal part using a glass fixative preform which is melted to form the the bond (col. 2, lines 46-68).

Kramer also teaches that the heating is locally performed around the bond and that the metal part is used to transfer (i.e. generate) heat during the heating process (col. 2, lines 50-55, Fig. 2, the "HEAT" is applied through the stainless steel shell which would obviously transfer heat by virtue of its metallic character).

Kramer also teaches removing non-bonding material from the fiber to expose the glass optical fiber underneath (col. 2, lines 60-68).

Kramer also teaches an optical part having at least one glass bond (Fig. 4).

Kramer also teaches a hermetic glass bond between a glass material and non-glass material (Fig. 4, col. 3, lines 8-10, col. 2, lines 46-68).

Art Unit: 1731

7. Claims 28, 30, 33-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Letter 3421915.

Letter teaches bonding a metal to glass using a lead oxide and lead fluoride containing glass (TABLE I, Example F).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kramer 5143531 in view of Knochel et al. 3467510.

Art Unit: 1731

Kramer teaches applicant's claimed invention. See the §102(b) rejection for Kramer's teachings. However, Kramer does not teach the subject matter of claims 4-5.

However, Knochel et al. teach that it is well known to use a RF susceptor to heat glass and metal while being bonded (col. 3, lines 60-75; col. 4, lines 1-10). The RF heater is an inductance heater. This would obviously heat the glass sealing powder through the heat generated in the metallic body.

It would have been prima facie obvious at the time the invention was made to combine Knochel et al.'s inductance heating method with Kramer's method of heating glass sheets because doing so would permit a highly focused heating method that would heat the glass frit via the metallic part, thereby providing uniform heating of the entire seal.

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kramer 5143531 in view of Churchill et al. 5407119.

Kramer teaches applicant's claimed invention. See the §102(b) rejection for Kramer's teachings. However, Kramer does not teach the subject matter of claim 6.

However, Churchill et al. teach that it is known to a glass to metal seal using a laser beam (claim 5).

It would have been prima facie obvious at the time the invention was made to combine Churchill et al.'s teachings with Kramer's method of bonding metal and glass because doing so would provide an extraordinarily focused heating method that would eliminate the excessive expenditure of fuel to heat the glass bond. This would translate into a savings on the fuel costs.

Art Unit: 1731

12. Claims 8-9, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kramer 5143531 in view of Masuda et al. JP 1-114804.

Kramer teaches applicant's claimed invention. See the §102(b) rejection for Kramer's teachings. However, Kramer does not teach the subject matter of claims 8-9 and 33.

However, Masuda et al. teach that it is known to use a lead oxide composition having a softening point around 330°C to form a glass bond (page 3, bottom of upper right-hand column).

It would have been prima facie obvious at the time the invention was made to combine Masuda et al.'s glass fixative composition with Kramer's method and optical part because Kramer teaches that any glass fixative composition may be used with his method (col. 2, lines 56-58).

13. Claims 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kramer 5143531 in view of Letter 3421915.

Kramer teaches applicant's claimed invention. See the §102(b) rejection for Kramer's teachings. However, Kramer does not teach the subject matter of claim 34-35.

However, Letter teaches that it is well known to use lead fluoride and boron oxide as glass components in a glass fixative composition (TABLE I, Example F). Moreover, claim 35 was construed to mean that the composition may contain any one of the listed compounds.

It would have been prima facie obvious at the time the invention was made to combine Letter's teachings with Kramer's method of bonding metal to glass because doing so would produce an exceptionally strong metal to glass bond as taught by Letter (abstract).

Art Unit: 1731

14. Claims 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kramer 5143531.

Kramer teaches applicant's claimed invention. See the §102(b) rejection for Kramer's teachings. However, Kramer does not explicitly teach the subject matter of claims 31-32.

However, Kramer does teach that the metal part is stainless steel (col. 2, lines 38-40). The Examiner takes Official Notice that stainless steel may possess both ferromagnetic and ferrimagnetic properties.

It would have been prima facie obvious at the time the invention was made to use a ferromagnetic or ferrimagnetic metal with Kramer's bonded part because Kramer teaches using stainless steel which may possess such properties.

Allowable Subject Matter

15. Claim 36 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. The following is a statement of reasons for the indication of allowable subject matter: none of the prior art examined taught or fairly suggested a glass fixative composition having all the claimed constituents within the ranges claimed in claim 36.

Art Unit: 1731

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Colaianni whose telephone number is 703-305-5493. The examiner can normally be reached on Monday to Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin, can be reached on (703) 308-1164. The fax phone number for the organization where this application or proceeding is assigned is 703-305-7115.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



**MICHAEL COLAIANNI
PRIMARY EXAMINER**

Art Unit 1731
December 10, 2002